United States; Richard R. Smith, USDA, ARS, U.S. Dairy Forage Research Center, University of Wisconsin, Madison, Wisconsin 53706, United States. Received 02/18/1994.

PI 578052. Trifolium pratense L.

Breeding. NEWRC. GP-21. Pedigree - A synthetic (Syn 2) developed by applying 5 cycles of recurrent phenotypic sel. for increased plant regeneration from cv. Arlington. Fifty-three cycle 4 plants intercrossed to prod. cycle 5 (Syn 1). Approx. 3000 Syn 1 pl.intercrossed. High plant regeneration from callus tissue culture (72%) and has use in genetic transformation and breeding research. Good general agronomic adaptation and relatively good resistance to Kabatiella caulivora.

The following were developed by Wayne Smith, Texas A&M University, Department of Soil & Crop Science, College Station, Texas 77843, United States; G.A. Niles, Texas A & M University, Dept. of Soil and Crop Sci., College Station, Texas 77843, United States. Received 02/18/1994.

PI 578053. Gossypium hirsutum L.

Breeding. TAM 87D3-24; 87D3-24. GP-599. Pedigree - PD 6992/79-XX-15 (a high strength line of unknown parentage). Similar to Stoneville 825 in plant height and phenology when grown under irrigation at College Station, Texas. Plants require about same length growing season as Stonevile 825. Leaves and stems pubescent. Mature bolls have storm resistance similar to most delta type cotton cultivars and not sufficient for commercial production in most of Texas. Fiber bundle strength 37% higher than Deltapine 50 and fiber length 6% higher when averaged over several years in Central and South Texas. Fiber properties similar to recent New Mexico Acala cultivars.

PI 578054. Gossypium hirsutum L.

Breeding. TAM 87G3-27; 87G3-24. GP-600. Pedigree - AET-108/1209-619-2s-77 (a breedling line)//PD 6992. Similar to Stoneville 825 in plant height and phenology when grown under irrigation at College Station, Texas. Plants require about same length growing season as Stonevile 825. Leaves and stems pubescent. Mature bolls have storm resistance similar to most delta type cotton cultivars and not sufficient for commercial production in most of Texas. Fiber bundle strength 14% higher than Deltapine 50 and fiber length 5% longer when averaged over several environments in Central and South Texas.

PI 578055. Gossypium hirsutum L.

Breeding. TAM 87D3-2527; D3-2527. GP-601. Pedigree - PD 6992/79-XX-15 (a high strength line of unknown parentage). Similar to Stoneville 825 in plant height and phenology when grown under irrigation at College Station, Texas. Plants require about same length growing season as Stonevile 825. Leaves and stems pubescent. Mature bolls have storm resistance similar to most delta type cotton cultivars and not sufficient for commercial production in most of Texas. Fiber bundle strength 33% higher than Deltapine 50 and fiber length 4% longer when averaged over several years in Central and South Texas. Fiber properties similar to recent New Mexico Acala cultivars.

PI 578056. Gossypium hirsutum L.

Breeding. TAM 86G3-30; 86G3-30. GP-602. Pedigree - PD 6520/Acala 1517-70//1656-71-2c-1-1/Delcot 277. Similar to delta cotton phenotype with the exception of shorter fruiting branch internodes. Plants similar to Stoneville 453 in height and maturity. Sufficient storm resistant open bolls for dryland production in Central and South Texas. Susceptible to all of the insects and diseases that normally attack cotton in Central and South Texas. Significantly stronger fiber bundle strength than Deltapine 50, with other fiber properties similar to Deltapine 50.